

## PATENT

### WHAT IS CLAIMED IS:

1. An apparatus comprising:  
a receiver adapted to receive a broadcast digital television signal comprising data relevant to one or more particular locations;  
5 a pseudorange unit adapted to generate a pseudorange based on the broadcast digital television signal; and  
a processor adapted to  
determine the location of the apparatus based on the pseudorange and a location of a transmitter of the broadcast digital television signal, and  
10 select a portion of the data relevant to the one or more particular locations based on the location of the apparatus determined by the processor.
2. The apparatus of claim 1, further comprising:  
an output device adapted to output the data selected by the processor.
- 15 3. The apparatus of claim 2, wherein the output device is selected from the group consisting of:  
a display; and  
a speaker.
- 20 4. The apparatus of claim 1, further comprising:  
a signal generator adapted to generate a correlation reference signal based on known characteristics of the broadcast digital television signal; and  
a correlator adapted to correlate the broadcast digital television signal with the  
25 correlation reference signal, thereby producing the pseudorange.
5. The apparatus of claim 1, wherein the processor is further adapted to:  
adjust the pseudorange based on a difference between a transmitter clock at the transmitter of the broadcast digital television signal and a known time reference; and  
30 determine the location of the apparatus based on the pseudorange adjusted by the processor and the location of the transmitter of the broadcast digital television signal.

6. The apparatus of claim 1, further comprising:  
a time-gated delay-lock loop to track the broadcast digital television signal.

5 7. The apparatus of claim 1, wherein the data relevant to one or more particular locations is selected from the group consisting of:

traffic information for the one or more particular locations;  
emergency information for the one or more particular locations;  
weather information for the one or more particular locations;  
10 maps of the one or more particular locations; and  
businesses in the one or more particular locations.

8. A computer comprising the apparatus of claim 1.

15 9. A personal digital assistant comprising the apparatus of claim 1.

10. A television comprising the apparatus of claim 1.

11. An apparatus comprising:  
20 receiver means for receiving a broadcast digital television signal comprising data relevant to one or more particular locations;

pseudorange means for generating a pseudorange based on the broadcast digital television signal; and

processor means for

25 determining the location of the apparatus based on the pseudorange and a location of a transmitter of the broadcast digital television signal, and

selecting a portion of the data relevant to the one or more particular locations based on the location of the apparatus determined by the processor.

30 12. The apparatus of claim 11, further comprising:  
output means for outputting the data selected by the processor.

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13. The apparatus of claim 11, further comprising:

signal generator means for generating a correlation reference signal based on known characteristics of the broadcast digital television signal; and

5 correlator means for correlating the broadcast digital television signal with the correlation reference signal, thereby producing the pseudorange.

14. The apparatus of claim 11, wherein the processor means:

10 adjusts the pseudorange based on a difference between a transmitter clock at the transmitter of the broadcast digital television signal and a known time reference; and

determines the location of the apparatus based on the pseudorange adjusted by the processor and the location of the transmitter of the broadcast digital television signal.

15. The apparatus of claim 11, further comprising:

15 time-gated delay-lock loop means for tracking the broadcast digital television signal.

16. The apparatus of claim 11, wherein the data relevant to one or more particular locations is selected from the group consisting of:

traffic information for the one or more particular locations;

20 emergency information for the one or more particular locations;

weather information for the one or more particular locations;

maps of the one or more particular locations; and

businesses in the one or more particular locations.

25 17. A method comprising:

receiving a broadcast digital television signal comprising data relevant to one or more particular locations;

generating a pseudorange based on the broadcast digital television signal;

30 determining location of an apparatus based on the pseudorange and a location of a transmitter of the broadcast digital television signal; and

selecting a portion of the data relevant to the one or more particular locations based on the determined location of the apparatus.

18. The method of claim 17, further comprising:

outputting the selected data.

19. The method of claim 17, further comprising:

generating a correlation reference signal based on known characteristics of the broadcast digital television signal; and

correlating the broadcast digital television signal with the correlation reference signal, thereby producing the pseudorange.

20. The method of claim 17, further comprising:

adjusting the pseudorange based on a difference between a transmitter clock at the transmitter of the broadcast digital television signal and a known time reference; and

determining the location of the apparatus based on the pseudorange adjusted by the processor and the location of the transmitter of the broadcast digital television signal.

21. The method of claim 17, wherein the data relevant to one or more particular locations is selected from the group consisting of:

traffic information for the one or more particular locations;

emergency information for the one or more particular locations;

weather information for the one or more particular locations;

maps of the one or more particular locations; and

businesses in the one or more particular locations.

22. Computer-readable media embodying instructions executable by a computer to perform a method comprising:

generating a pseudorange based on a broadcast digital television signal comprising data relevant to one or more particular locations;

determining location of an apparatus based on the pseudorange and a location of a transmitter of the broadcast digital television signal; and

selecting a portion of the data relevant to the one or more particular locations based on the determined location of the apparatus.

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23. The media of claim 22, wherein the method further comprises:  
outputting the selected data.

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24. The media of claim 22, wherein the method further comprises:  
generating a correlation reference signal based on known characteristics of the broadcast digital television signal; and  
correlating the broadcast digital television signal with the correlation reference signal, thereby producing the pseudorange.

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25. The media of claim 22, wherein the method further comprises:  
adjusting the pseudorange based on a difference between a transmitter clock at the transmitter of the broadcast digital television signal and a known time reference; and  
determining the location of the apparatus based on the pseudorange adjusted by the processor and the location of the transmitter of the broadcast digital television signal.

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26. The media of claim 22, wherein the data relevant to one or more particular locations is selected from the group consisting of:

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traffic information for the one or more particular locations;  
emergency information for the one or more particular locations;  
weather information for the one or more particular locations;  
maps of the one or more particular locations; and  
businesses in the one or more particular locations.